

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Tisdale Bypass	Left	4.51	04/07/2017 04/07/2017	Bob Duffey

LM Start		Rating **	A	Issue No.	2
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals			°	°
DWR ID	DWR_ST0009_01_s_2013_2				
Comment Code					
Inspector Comment					
Sutter Yard has the O&M manuals.					

No Photos

LM Start		Rating **	A	Issue No.	4
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment			°	°
DWR ID	DWR_ST0009_01_s_2013_4				
Comment Code					
Inspector Comment					
Sutter Yard has a stockpile of emergency supplies and equipment.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Unit No. 01 Tisdale Bypass	Left	4.51	04/07/2017 04/07/2017	Bob Duffey

LM Start		Rating **	A	Issue No.	5	
LM End		Issue Type +	Ma	Location *	N/A	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Flood Preparedness & Training				o	
					o	
DWR ID	DWR_ST0009_01_s_2013_5					
Comment Code						
Inspector Comment						
Sutter Yard had flood fight training October 2016.						

No Photos

LM Start	0.03	Rating **	M	Issue No.	10
LM End	0.03	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.027253 °	39.027253 °
				-121.821330 °	-121.821330 °
DWR ID	DWR_ST0009_01_f_2016_10				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : SP_2017_ST0009_286_10_20170315_00002.jpg



View of grass taller than 12 inches blocking visibility.

LM Start	2.11	Rating **	M	Issue No.	11
LM End	2.11	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			39.028392 °	39.028392 °
				-121.782887 °	-121.782887 °
DWR ID	DWR_ST0009_01_f_2016_11				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP_2017_ST0009_286_11_20170315_00003.jpg



View of the rodent holes along the landside slope.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
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Unit No. 01 Tisdale Bypass	Left	4.51	04/07/2017 04/07/2017	Bob Duffey

LM Start	2.14	Rating **	A/W	Issue No.	25
LM End	2.14	Issue Type +	Ma	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP LMA Responsibility		39.028132 °	39.028132 °	
			-121.782389 °	-121.782389 °	
DWR ID					

Comment Code

Inspector Comment

FS_ID:51484
DS_ID:16591
EP_NO: 10099
Repair Type: No Action Needed
Crossing Status: Found
UCIP Comments: 4/10/2017 Crossing appears to be in good condition.
(DWR Sutter Yard- AFreitag)10/11/2016 Crossing appears to be in good condition.
(DWR Sutter Yard - afreitag)4/18/2016 Crossing appears to be in good condition. No noticeable issues to report.
5/7/2015 Crossing is in good condition. No noticeable issues to report.
11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.
10/30/2013 Same as last inspection.5/20/2013 Same as last inspection.
FIELD_STRUCT_DESC: 1 of 2: 48-inch by 84-inch (4-foot by 7-foot) reinforced concrete discharge tunnel through the levee, 38 feet below the crown. Slide gate in 4-foot by 15-foot concrete well on the waterside (WS) slope. Pump house located on the landside (LS) toe and wooden flap gates on the WS toe. (Automatic Board Order (ABO) issued as Permit No. 10099, 1955 - Reclamation District No. 1660). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 133, August 1955 (Station 1044+60)].
FS Date: 4/12/2017 9:20:05 AM

LM Start	2.14	Rating **	A/W	Issue No.	25 (cont)
LM End	2.14	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP_SP_2017_51484_64226.jpg



Slide gates on WS shoulder.

Photo 2 of 3 : UCIP_SP_2017_51484_64225.jpg



Wooden Flap gates on WS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Tisdale Bypass	Left	4.51	04/07/2017 04/07/2017	Bob Duffey

Pump house on LS toe.

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Tisdale Bypass	Left	4.51	04/07/2017 04/07/2017	Bob Duffey

LM Start	2.14	Rating **	A/W	Issue No.	26
LM End	2.14	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.028124 °	39.028124 °
				-121.782344 °	-121.782344 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:51485
DS_ID:16856
EP_NO: 10099
Repair Type: No Action Needed
Crossing Status: Found
UCIP Comments: 4/10/2017 Crossing appears to be in good condition.
(DWR Sutter Yard- AFreitag)10/11/2016 Crossing appears to be in good condition.
(DWR Sutter Yard - afreitag)4/18/2016 Crossing appears to be in good condition. No noticeable issues to report.
5/7/2015 Crossing is in good condition. No noticeable issues to report.
11/13/2014 Same as last inspection.
5/12/2014 Same as last inspection.
10/30/2013 Same as last inspection.
5/20/2013 Same as last inspection.
FIELD_STRUCT_DESC: 2 of 2: 48-inch by 84-inch (4-foot by 7-foot) concrete discharge tunnel through the levee, 38 feet below the crown. Slide gate in 4-foot by 15-foot concrete well on the waterside (WS) slope. Pumphouse located on the landside (LS) toe and wooden flap gates on the WS toe. (Automatic Board Order (ABO) issued as Permit No. 10099, 1955 - Reclamation District No. 1660). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 133, August 1955 (Station 1044+60)].
FS Date: 4/12/2017 9:20:37 AM

LM Start	2.14	Rating **	A/W	Issue No.	26 (cont)
LM End	2.14	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP_SP_2017_51485_64230.jpg



Slide gates on WS shoulder.

Photo 2 of 3 : UCIP_SP_2017_51485_64229.jpg



Wooden flap gates on WS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Tisdale Bypass	Left	4.51	04/07/2017 04/07/2017	Bob Duffey

LM Start	2.14	Rating **	A/W	Issue No.	26 (cont)
LM End	2.14	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.028124 °	39.028124 °
				-121.782344 °	-121.782344 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51485 DS_ID:16856 EP_NO: 10099 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 4/10/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/11/2016 Crossing appears to be in good condition.(DWR Sutter Yard - afreitag)4/18/2016 Crossing appears to be in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.10/30/2013 Same as last inspection.5/20/2013 Same as last inspection. FIELD_STRUCT_DESC: 2 of 2: 48-inch by 84-inch (4-foot by 7-foot) concrete discharge tunnel through the levee, 38 feet below the crown. Slide gate in 4-foot by 15-foot concrete well on the waterside (WS) slope. Pumphouse located on the landside (LS) toe and wooden flap gates on the WS toe. (Automatic Board Order (ABO) issued as Permit No. 10099, 1955 - Reclamation District No. 1660). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 133, August 1955 (Station 1044+60)]. FS Date: 4/12/2017 9:20:37 AM					

Photo 3 of 3 : UCIP_SP_2017_51485_64228.jpg



Pump house on LS toe.

LM Start	2.16	Rating **	U	Issue No.	12
LM End	2.16	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			39.028137 °	39.028137 °
				-121.782020 °	-121.782020 °
DWR ID	DWR_ST0009_01_f_2016_12				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 2 : SP_2017_ST0009_286_12_20170315_00004.jpg



View of a rodent hole along the levee crown.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Tisdale Bypass	Left	4.51	04/07/2017 04/07/2017	Bob Duffey

LM Start	2.16	Rating **	U	Issue No.	12 (cont)	
LM End	2.16	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			39.028137 °		39.028137 °
				-121.782020 °		-121.782020 °
DWR ID	DWR_ST0009_01_f_2016_12					
Comment Code						
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.						
Inspector Comment						

Photo 2 of 2 : SP_2017_ST0009_286_12_20170315_00005.jpg



Another view of the rodent holes along the crown and landside slope.

* Location
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CR : Crown

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+ Issue Type
Ma : Maintenance Deficiency
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Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Tisdale Bypass	Right	4.43	04/07/2017 04/07/2017	Bob Duffey

LM Start	0.69	Rating **	M	Issue No.	9
LM End	0.71	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.025602 °	39.025657 °
				-121.808527 °	-121.808027 °
DWR ID	DWR_ST0009_02_s_2017_9				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Repair the erosion along the landside toe.					

Photo 1 of 1 : SP_2017_ST0009_287_9_20170410_00016.jpg



View of the erosion along the landside toe from the County Road.

LM Start	0.97	Rating **	M	Issue No.	10
LM End	0.98	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.025540 °	39.025572 °
				-121.803272 °	-121.802990 °
DWR ID	DWR_ST0009_02_s_2017_10				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Repair the erosion along the landside toe.					

Photo 1 of 1 : SP_2017_ST0009_287_10_20170410_00017.jpg



View of the erosion along the landside toe from the County Road.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
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+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
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Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Tisdale Bypass	Right	4.43	04/07/2017 04/07/2017	Bob Duffey

LM Start	1.14	Rating **	M	Issue No.	13
LM End	1.14	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.025460 °	39.025460 °
				-121.800022 °	-121.800022 °
DWR ID	DWR_ST0009_02_f_2016_13				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Erosion around the WS concrete vault.					

Photo 1 of 2 : SP_2017_ST0009_287_13_20170315_00005.jpg



View of the erosion along the concrete vault.

LM Start	1.14	Rating **	M	Issue No.	13 (cont)
LM End	1.14	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP_2017_ST0009_287_13_20170315_00006.jpg



Another view of the erosion along the concrete vault.

LM Start	1.19	Rating **	M	Issue No.	290
LM End	1.19	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.025490 °	39.025490 °
				-121.799240 °	-121.799240 °
DWR ID	DWR_ST0009_02_s_2015_290				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Sutter Yard needs to monitor the erosion along the berm.					

Photo 1 of 1 : SP_2017_ST0009_287_290_20170315_00007.jpg



View of the erosion along the waterside berm.

*** Location**
LS : Land Side N/A : Not Applicable
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CR : Crown

**** Rating**
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+ Issue Type
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Tisdale Bypass	Right	4.43	04/07/2017 04/07/2017	Bob Duffey

LM Start	1.29	Rating **	M	Issue No.	4
LM End	1.29	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.025478 °	39.025478 °
				-121.797232 °	-121.797232 °
DWR ID	DWR_ST0009_02_s_2013_4				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Sutter Yard needs to monitor the erosion.					

Photo 1 of 1 : SP_2017_ST0009_287_4_20170315_00003.jpg



View of the erosion along the waterside berm.

LM Start	1.48	Rating **	M	Issue No.	5
LM End	1.50	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.025460 °	39.025446 °
				-121.793815 °	-121.793347 °
DWR ID	DWR_ST0009_02_s_2013_5				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Sutter Yard needs to monitor the erosion.					

Photo 1 of 1 : SP_2017_ST0009_287_5_20170315_00004.jpg



View of the erosion along the waterside berm.

LM Start	3.93	Rating **	M	Issue No.	2
LM End	3.93	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.025060 °	39.025060 °
				-121.748178 °	-121.748178 °
DWR ID	DWR_ST0009_02_f_2016_2				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					

Photo 1 of 1 : SP_2017_ST0009_287_2_20170315_00002.jpg



View of the erosion along the waterside berm.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Tisdale Bypass	Right	4.43	04/07/2017 04/07/2017	Bob Duffey

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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